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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,570	07/11/2003	Earl Russell Geddes		1342

7590 07/13/2005
Earl Geddes
43516 Scenic Lane
Northville, MI 48167

EXAMINER

LE, HUYEN D

ART UNIT	PAPER NUMBER
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2646

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,570

Applicant(s)

GEDDES, EARL ROSSELL

Examiner

HUYEN D. LE

Art Unit

2646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Objection C.F.R. 1.75

1. Claims 1-4 are objected as presented inconsistency.

In claim 3, line 2, before "mouth", "a" should be changed to --the-- for the consistency.

In claim 4, line 2, before "mouth", "a" should be changed to --the-- for the consistency.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-4, as broadly claimed, are rejected under 35 U.S.C. 102(a) as being anticipated by Adamson (U.S. patent 6,581,719).

Regarding claims 1-2, Adamson teaches an acoustic waveguide for propagating sound radiation from an acoustic transducer (1). As shown in figure 1, the waveguide has a throat and a mouth termination. As broadly claimed, the Adamson system has two or more sections along the length of the waveguide having bounding surfaces that coordinate of the Elliptic Cylinder (figures 1, 2b and 3b, col. 3, lines 19-21 and lines 57-61, and col. 8, lines 16-18 in Adamson; and also see page 6, lines 8-9 and page 7, lines 17-20 in the specification of the present invention) and Prolate Spheroidal (see the waveguide 4" in figures 8a-8c) as claimed (figure 1, and see col. 2, lines 50-60 and col. 10, lines 17-23).

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Regarding claims 3-4, Adamson shows the mouth termination that has a radius (figure 1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, as interpreted in a different manner, rejected under 35 U.S.C. 103(a) as being unpatentable over Adamson (U.S. patent 6,581,719).

Regarding claims 1-2, as interpreted in a different manner, Adamson teaches an acoustic waveguide for propagating sound radiation from an acoustic transducer (1). As shown in figure 1, the waveguide has a throat and a mouth termination.

Adamson does not specifically disclose two or more sections along the length of the waveguide having bounding surfaces that are substantially Elliptic Cylinder and Prolate Spheroidal as claimed.

However, as disclosed on col. 2, lines 50-60, the Elliptic Cylinder waveguide and Prolate Spheroidal waveguide can be joined in an obvious manner to produce a waveguide of extended length.

Therefore, it would have been obvious to one skilled in the art to provide the Elliptic Cylinder to be joined and coordinated with the Prolate Spheroidal in the Adamson waveguide for better connecting the waveguide to a rectangular sound source.

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Regarding claims 3-4, Adamson shows the mouth termination that has a radius (figure 1).

6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Acoustic Waveguide Theory of Earl Geddes (Vol. 37, No. 7/8, 1989 July/August) as cited in the IDS filed 07/11/03.

Regarding claims 1-2, Geddes (pages 554-569) teaches an acoustic waveguide for propagating sound radiation from an acoustic transducer (see the left column on page 560). Geddes does not specifically show the Elliptic Cylinder and Prolate Spheroidal coordinates from the throat to the mouth as claimed.

However, Geddes does teach that the waveguides of the Elliptic Cylinder and Prolate Spheroidal can be joined and coordinated (figures 2, 3, 4, 5).

Therefore, it would have been obvious to one skilled in the art to provide two or more sections along the waveguide of Geddes having bounding surfaces that are substantially Elliptic Cylinder and Prolate Spheroidal to be coordinated from the throat to the mouth for better connecting the waveguide to a rectangular sound source.

Regarding claims 3-4, Geddes shows the mouth termination that has a radius (figures 2, 4, 5).

Response to Arguments

7. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Heil (U.S. patent 5,163,167) teaches a sound wave guide at the output of a loudspeaker.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUYEN D. LE whose telephone number is (571) 272-7502. The examiner can normally be reached on 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SINH TRAN can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HL
July 7, 2005



HUYEN LE
PRIMARY EXAMINER